

Amendments to the Claims

1. (Currently Amended) An end fitting for a flexible pipe, the end fitting comprising:

a housing having an inner surface defining a bore for receiving an end portion of the pipe, the bore having at least two axially spaced raised portions each having a curved cross section for engaging the corresponding outer surface of the pipe to provide a seal; and

a radially extending test port formed through the housing and opening at an outer surface of the housing and at the inner surface of the housing at a location between the raised portions.

2. (Previously Presented) The end fitting of claim 1 wherein each raised portion is formed integrally with the housing.

3. (Previously Presented) The end fitting of claim 1 or 2 wherein each raised portion is in the form of an annular ring.

4. (Canceled)

5. (Previously Presented) The end fitting of claim 1 wherein each raised portion is formed by providing scallops in the housing surface.

6. (Currently Amended) The end fitting of claim 1 wherein each raised portion is formed by providing ~~undulation~~ sin undulations in the housing surface.

7. (Currently Amended) An end fitting for a flexible pipe, the end fitting comprising:

a housing having an inner surface defining a bore for receiving an end portion of the pipe, the bore having at least two axially spaced raised portions each having a curved cross section for engaging the corresponding outer surface of the pipe to provide a seal; and

~~The end fitting of claim 1 further comprising~~ a radially extending, internally threaded, opening formed through the housing and extending to the bore, and a bolt threadedly engaging the opening and adapted to engage the pipe.

8. (Previously Presented) The end fitting of claim 1 wherein the bore is stepped to define at least two bore portions having different diameters, each raised portion being formed in the bore portion having the lesser diameter.

9. (Currently Amended) The end fitting of claim 1 ~~or 8~~ further comprising a support ring extending within an end portion of the pipe so that the latter end portion of the pipe extends between the raised portions and the support ring.

10. (Currently Amended) The end fitting of claim 9 wherein:
the bore is stepped to define first, second, and third bore portions of progressively decreasing diameters, the third bore portion having the smallest diameter and the first bore portion having the largest diameter, the second bore portion being intermediate the first and third bore portions, and the raised portions being formed in the second bore portion;
the support ring has an annular flange formed thereon that engages ~~the~~ a shoulder defined between the ~~two~~ second and third bore portions.

11. (Currently Amended) The end fitting of claim 10 wherein the flange extends radially outwardly from the ~~flange~~ support ring.

12. (Previously Presented) The end fitting of claims 10 wherein the flange extends between the shoulder and the corresponding end of the pipe.

13. (Original) The end fitting of claim 8 wherein the pipe has multiple layers, wherein the end portions of all of the layers extends in the bore portion with the greater diameter; and wherein the end portion of less than all the layers extend in the bore portion with the lesser diameter.

14. (Canceled)

15. (Currently Amended) A pipe assembly comprising an end fitting comprising:
a housing having an inner surface defining a bore ~~for receiving an end portion of the pipe~~,
the bore having at least two axially spaced raised portions each having a curved cross section;
and

a flexible pipe having an end portion extending in the bore, the raised portions engaging
the corresponding outer surface of the pipe to provide a seal;

wherein the bore is stepped to define at least two bore portions having different
diameters, the raised portions being formed in the bore portion having the lesser diameter;

wherein the pipe has multiple layers, the end portions of all of the layers extend in the
bore portion with the greater diameter, and the end portions of less than all the layers extend in
the bore portion with the lesser diameter.

16. (Currently Amended) The pipe assembly of claim 15 wherein each raised portion
is formed integrally with the housing.

17. (Currently Amended) The pipe assembly of claim 15 or 16 wherein each raised
portion is in the form of an annular ring.

18. (Currently Amended) A pipe assembly comprising:
an end fitting comprising a housing having an inner surface defining a bore, the bore
having at least two axially spaced raised portions each having a curved cross section;
a flexible pipe having an end portion extending in the bore, the raised portions engaging
the corresponding outer surface of the pipe to provide a seal; and

~~The pipe assembly of claim 15 further comprising~~ a radially extending test port formed
through the housing and opening at an outer surface of the housing and at the inner surface of the
housing at a location between the raised portions.

19. (Currently Amended) The pipe assembly of claim 15 wherein each raised portion
is formed by providing scallops in the housing surface.

20. (Currently Amended) The pipe assembly of claim 15 wherein each raised portion is formed by providing undulations in the housing surface.

21. (Currently Amended) A pipe assembly comprising:
an end fitting comprising a housing having an inner surface defining a bore, the bore
having at least two axially spaced raised portions each having a curved cross section;
a flexible pipe having an end portion extending in the bore, the raised portions engaging
the corresponding outer surface of the pipe to provide a seal; and

~~The pipe assembly of claim 15 further comprising~~ a radially extending, internally threaded, opening formed through the housing and extending to the bore, and a bolt threadably engaging the opening and adapted to engage the pipe.

22. (Canceled)

23. (Currently Amended) The pipe assembly of claim 15 ~~or 22~~ further comprising a support ring extending within an end portion of the pipe so that the latter end portion of the pipe extends between the raised portions and the support ring.

24. (Currently Amended) The pipe assembly of claim 23 wherein:
the at least two bore portions comprises a first bore portion having a first diameter, a
second bore portion adjacent the first bore portion and having a second diameter that is less than
the first diameter, and a third bore adjacent the second bore portion having a third diameter that
is less than the second diameter, the raised portions being formed in the second bore portion;
the ring has an annular flange formed thereon that engages ~~the~~ a shoulder defined between the ~~two~~ second and third bore portions.

25. (Currently Amended) The pipe assembly of claim 24 wherein the flange extends radially outwardly from the ~~flange~~ support ring.

26. (Previously Presented) The pipe assembly of claims 24 wherein the flange extends between the shoulder and the corresponding end of the pipe.

27. (Canceled)

28. (Canceled)

29. (Currently Amended) A method of assembling a pipe assembly comprising:
forming a bore in an end fitting, forming at least two axially spaced raised portions each having a curved cross section on the inner surface of the housing defining the bore; ~~and~~
inserting an end portion of a flexible pipe in the bore with the raised portions engaging the corresponding outer surface of the pipe to provide a seal; and
forming a radially extending, internally threaded, opening through the housing and extending to the bore, and threadedly engaging the opening with a bolt and extending the bolt through the opening so that it engages the pipe.

30. (Previously Presented) The method of claim 29 wherein each raised portion is formed integrally with the housing.

31. (Previously Presented) The method of claim 29 or 30 wherein each raised portion is in the form of an annular ring.

32. (Currently Amended) A method of assembling a pipe assembly comprising:
forming a bore in an end fitting, forming at least two axially spaced raised portions each having a curved cross section on the inner surface of the housing defining the bore;
inserting an end portion of a flexible pipe in the bore with the raised portions engaging the corresponding outer surface of the pipe to provide a seal; and

~~The method of claim 29 further comprising~~ forming a radially extending test port through the housing, the test port opening at an outer surface of the housing and at the inner surface of the housing at a location between the raised portions.

33. (Previously Presented) The method of claim 29 wherein the step of forming each raised portion comprises providing scallops in the housing surface.

34. (Previously Presented) The method of claim 29 wherein the step of forming each raised portion comprises providing undulations in the housing surface.

35. (Canceled)

36. (Previously Presented) The method of claim 29 further comprising stepping the bore to define at least two bore portions having different diameters, each raised portion being formed in the bore portion having the lesser diameter.

37. (Currently Amended) The method of claim 29 ~~or 36~~ further comprising inserting a support ring within an end portion of the pipe so that the latter end portion of the pipe extends between the raised portions and the support ring.

38. (Currently Amended) The method of claim 37 further comprising:
stepping the bore to define first, second, and third bore portions of progressively decreasing diameters, the raised portions being formed in the second bore portion;
providing an annular flange on the ring, the step of inserting comprising disposing the flange in engagement with ~~the~~ a shoulder defined between the ~~two~~ second and third bore portions.

39. (Currently Amended) The method of claim 38 wherein the flange extends radially outwardly from the ~~flange~~ support ring.

40. (Previously Presented) The method of claims 38 wherein the flange extends between the shoulder and the corresponding end of the pipe.

41. (Currently Amended) A method of assembling a pipe assembly comprising:

forming a bore in an end fitting, forming at least two axially spaced raised portions each having a curved cross section on the inner surface of the housing defining the bore;

inserting an end portion of a flexible pipe in the bore with the raised portions engaging the corresponding outer surface of the pipe to provide a seal;

stepping the bore to define at least two bore portions having different diameters, each raised portion being formed in the bore portion having the lesser diameter;

~~The method of claim 36 further comprising~~ providing the pipe with multiple layers, disposing the end portions of all of the layers in the bore portion with the greater diameter; and disposing the end portions of less than all the layers in the bore portion with the lesser diameter.

42. (Canceled)

43. (Previously Presented) The method of claim 29, further comprising applying a radially outwardly directed force to the inner surface of the pipe end portion to compress the pipe end portion against the raised portions.